

ISSUANCE TRANSMITTAL
SHEET

N A S A
National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama 35812

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| Issuance Number: MMI 6200.2A | Date: January 28, 1988 |
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Material Transmitted:

1. Management Instruction, MMI 6200.2A, Subject: "Management of Marine Operations."
2. This instruction was revised to:
 - a. Incorporate Change 1;
 - b. Move detailed responsibilities from body of instruction to Attachment;
 - c. Reassign all responsibilities from Science and Engineering Directorate to Transportation Management Division; and
 - d. Make minor editorial changes.

Filing Instructions:

Remove MMI 6200.2, dated November 1, 1981, and Change 1 thereto, and replace with MMI 6200.2A.

MANAGEMENT
INSTRUCTION

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| Originating Organization: CN01 | Effective Date: January 28, 1988 | MMI: 6200.2A |
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Subject: Management of Marine Operations

1. PURPOSE

To establish policy and procedures for marine transportation operations at MSFC-Huntsville and Michoud Assembly Facility (MAF).

2. APPLICABILITY

This instruction is applicable to all organizational elements of MSFC involved in marine operations at the MSFC-Huntsville and MAF ports. The ports include docks, wharves, mooring facilities, and utilities at the port and the harbor.

3. POLICY

MSFC barges and commercial vessels will be used to transport outsized freight and space hardware by water when transportation by land or air modes are not feasible or cost effective.

4. RESPONSIBILITIES

- a. The Director, Management Operations Office has overall management responsibility for the planning, transportation and traffic management services associated with movement of outsized freight and space hardware by water modes, including movements under contract by specially designed ships or barges. Maintenance of the MSFC-Huntsville Port Facility and the MAF Port Facility shall be the responsibility of the MSFC Facilities Office and the MAF Manager's office respectively.

MSFC-Form 2911 (Rev.October 1981)

- b. The Chief, Transportation Management Division has oversight responsibility for MSFC marine operations, including all action necessary to ensure safe, efficient, and timely delivery of cargo as requested by Program/Project Offices and technical direction and engineering support for major maintenance (drydocking), repairs, or modification to marine equipment.
- c. Directors/Managers of Basic MSFC organizations will coordinate the need for marine transportation with the Special Transportation Branch and provide the necessary funding for operational costs of transportation.
- d. Manager, Michoud Assembly Facility will be responsible for MAF port maintenance and barge maintenance and/or repair services not requiring drydocking while in port at MAF.
- e. Detailed responsibilities for Marine Operations are provided in the Attachment to this instruction.

5. CANCELLATION

MMI 6200.2, dated November 2, 1981, and Change 1 thereto.

(Original Signed by:)
James R. Thompson, Jr.
Director

Attachment:

Detailed Responsibilities

Distribution:

SDL 2

ATTACHMENT

DETAILED RESPONSIBILITIES

1. Director, Management Operations Office will:
 - a. Establish and maintain a Configuration Control Plan for the docks and harbor at MSFC-Huntsville; and
 - b. Appoint a chairman and individual members of the Configuration Control Board for the MSFC-Huntsville docks and harbor.
2. Chief, Transportation Management Division, or his/her designee will:
 - a. Provide coordination with Program/Project Offices to select the mode of transportation for outsized cargo;
 - b. Provide data to the External Tank Project Control Office on operational and maintenance costs of the MSFC barge fleet;
 - c. Take all necessary action to ensure safe, efficient, and timely delivery of cargo by providing properly outfitted, fully manned seaworthy vessels, and the loading/unloading/ tiedown equipment required for the cargo;
 - d. Use competitive procedures to obtain the lowest available price for qualified tug service. Government Bills of Lading will normally be used for tug services. In the process of procuring tug service, appropriate internal controls will be utilized, including the separation of duties and coordination with the Procurement Office and the Office of Chief Counsel;
 - e. Develop and prepare Technical Specifications and Scope-of-Work for major maintenance (drydocking), repairs, or modifications to NASA vessels performed at a contractor's shipyard or at a government installation;

- f. Provide preliminary design and technical specifications for the detail design, construction, and acquisition of new marine equipment;
- g. Ensure that the NASA covered barges meet the requirements of American Bureau of Shipping (ABS) and the United States Coast Guard (USCG);
- h. Provide technical direction and act as technical monitor for all contracted marine activities to include:
 - (1) Barge maintenance performed under contractor Facility Operating Plan (FOP) at MAF;
 - (2) Major maintenance (drydocking), repairs, or modifications to marine equipment;
 - (3) Consultant studies of operations, equipment needs and design criteria for new equipment or modifications to existing equipment;
 - (4) Towing, crewing, and servicing marine equipment enroute; and
 - (5) Design, construction, and acquisition of new marine equipment.
- i. Provide engineering support for the following:
 - (1) Development of cargo tiedown plans, including load calculations and layout drawing;
 - (2) Design and development of special tiedown equipment;
 - (3) Engineering assessment of interface of barges and docks; and

- (4) Provide computer aided design/computer aided manufacturer (CAD/CAM) support for NASA barge drawings and cell library marine equipment, i.e., pumps, valves, fittings, etc.
- j. Coordinate with Program/Project Offices to assure appropriate funding of the marine transportation services provided;
- k. Coordinate with MSFC Safety, Reliability, Maintainability and Quality Assurance Office to assure imposition of appropriate safety constraints on personnel, equipment, and operations;
- l. Coordinate with MSFC Facilities Office or MAF Manager's office as applicable to effect periodic review and assessment of harbor and dock facilities at MSFC-Huntsville and MAF;
- m. Coordinate support required from other Centers and other Agencies; i.e., U.S. Navy, U.S. Coast Guard, U.S. Weather Bureau, and State Police;
- n. Advise the Chief, MSFC Security Division, of shipment schedules, shipment of program critical hardware, and vessel arrivals and departures at MSFC-Huntsville Harbor;
- o. Administer and be responsible for MSFC-Huntsville port operations in accordance with the MSFC Docks and Harbor Configuration Control Plan and Operating Procedures, and the regulations of NASA and MSFC; and
- p. Provide, through contract, the services of a qualified marine inspector to inspect and certify NASA vessels and tugs prior to each shipment; inspect and approve towing method and hook-up, and approve towing routes.

3. MSFC-Huntsville Docks and Harbor Configuration Control Board will:
 - a. Establish, maintain, and control changes to operating procedures for the MSFC-Huntsville harbor;
 - b. Conduct physical changes to the MSFC-Huntsville docks and harbor in accordance with the MSFC Docks and Harbor Configuration Control Plan; and
 - c. Assess any proposed use of the MSFC-Huntsville docks and harbor which fall outside the established operating procedures.
4. Director, Safety, Reliability, Maintainability and Quality Assurance Office will:
 - a. Conduct periodic reviews and assessment of MSFC-Huntsville and MAF marine transportation equipment, facilities, and operations to assure compliance with NASA, OSHA, U.S. Coast Guard, and all other applicable safety standards and regulations; and
 - b. Advise the Special Transportation Branch of any safety deficiencies noted and assess the corrective action taken.
5. Director, Facilities Office will:
 - a. Perform periodic reviews of MSFC-Huntsville docks and harbor system; and
 - b. Advise the Special Transportation Branch of facility deficiencies and, with Special Transportation Branch approval, effect repair or major facility modification as required.

6. Managers/Directors, Program/Project Offices will:
 - a. Coordinate the need for marine transportation with the Chief, Special Transportation Branch, or his/her designee as far in advance as possible to permit efficient planning for equipment use, and system control;
 - b. Provide necessary funding for operational costs of transportation (towing, crewing, and docking). Funding for marine transportation system maintenance costs are provided by the External Tank Project Office;
 - c. Provide schedule of available-for-loading date, on-dock-need date, and other schedules;
 - d. Provide information on special requirements such as environmental control, enroute monitoring, or electrical power; and
 - e. Advise the Special Transportation Branch when program critical or STS critical hardware is to be shipped by water modes.
7. Manager, Michoud Assembly Facility (MAF) will:
 - a. Establish and maintain a Configuration Control Plan for the docks and harbor at MAF;
 - b. Appoint a chairman and individual members of the Configuration Control Board for the MAF docks and harbor;
 - c. Provide technical advice and assistance on all matters pertaining to the operations of the MAF Port;

- d. Administer and be responsible for MAF Port maintenance in accordance with the MAF Docks and Harbor Configuration Control Plan and Operating Procedures, and the regulations of NASA, MSFC, and MAF;
- e. Maintain liaison with MSFC Special Transportation Branch Chief or his/her designee on all matters pertaining to the operation of the Michoud Port;
- f. Perform periodic reviews of MAF docks and harbor system;
- g. Advise the Special Transportation Branch of facility deficiencies and, with Special Transportation Branch approval, effect repair or major facility modifications as required;
- h. Take appropriate action to maintain security of loaded and unloaded vessels which are docked at MAF Port;
- i. Keep Chief, MSFC Security Division, informed of MAF security activities; and
- j. Through the Contractor Facility Operations Plan:
 - (1) Operate the MAF Port Facility;
 - (2) Maintain all necessary records and/or logs;
 - (3) Be responsible for loading, unloading, movement, and storage of cargo that does not fall within the Scope- of-Work covered by other prime contractors and tenants;
 - (4) Properly secure all vessels in port in preparation for hurricanes or other adverse conditions and take other precautionary measures as required to safeguard the port;

- (5) Maintain, service, and operate a government-furnished utility boat to provide surveillance over all floating equipment in port, over all adjoining port facilities, such as pilings and buoys and to take soundings in MAF slip as required;
- (6) Provide a Spill Prevention and Control Plan, in accordance with Environmental Protection Agency (EPA) regulations, to assure that possibility of pollution of the waterways is minimized. Provide for immediate clean-up in accordance with the approved plan should a spill of pollutants occur;
- (7) Provide barge maintenance and/or repair services not requiring drydocking while in port at MAF;
- (8) Accomplish emergency repairs to barges while in transit or docked at other ports; and
- (9) Provide for the maintenance and repair of NASA-owned barges, their radar systems, ancillary deck and engine systems. This function includes the following:
 - (a) Janitorial services as required, including complete clean-up before and after each voyage;
 - (b) Paint repairs to topsides and barge interior spaces, including frequent treatment of oxidation as required;
 - (c) Repairs to gear such as: lines, doors, decks, anchors and chains, flight item tiedown hardware, cargo handling, and lifesaving equipment;
 - (d) Maintain an inventory of repair parts, supplies, and other selected barge equipment;

- (e) Preparation of the barges for scheduled dry-docking and periodic shipyard overhaul operations including the removal of supplies, tools, loose galley equipment and provisions, bedding and linens, and other equipment to be stored;
 - (f) Assurance that all maintenance and repairs shall be in accordance with the U.S. Coast Guard, American Bureau of Shipping, U.S. Department of Labor and applicable manufacturers' equipment instruction manuals;
 - (g) Adequate preventive maintenance program whereby the mechanical and electrical systems are cycled periodically and "megger" and ampere readings taken regularly and recorded; and
 - (h) Collection of required maintenance data for future reference.
8. MAF Docks and Harbor Configuration Control Board will:
- a. Establish, maintain and control changes to operating procedures for the MAF harbor;
 - b. Control physical changes to the MAF docks and harbor in accordance with the MAF Docks and Harbor Configuration Control Plan; and
 - c. Assess any proposed use of the MAF docks or harbor which falls outside the established operating procedures.
9. Chief, MSFC Security Division will:
- a. Take appropriate action to maintain security of loaded and unloaded vessels which are docked at the MSFC-Huntsville Port; and
 - b. Provide functional management of MAF security activities.